

## Setup

### Setting up Projects and Infrastructure Components

Created Project: Green Energy with categories: Energy, Air Quality  
🌳 Created Environmental Component: GE Turkenschanzpark  
Added GE Turkenschanzpark to: Green Energy  
🚍 Created Transportation Component: GE Wiener Linien Bus Department  
Added GE Wiener Linien Bus Department to: Green Energy  
🏢 Created Building Component: GE TU Karlsplatz  
Added GE TU Karlsplatz to: Green Energy  
Created Project: Smart Transportation with categories: Transportation  
🚍 Created Transportation Component: ST Wiener Linien  
Added ST Wiener Linien to: Smart Transportation  
🚍 Created Transportation Component: ST Wiener Linien Strassenbahn  
Added ST Wiener Linien Strassenbahn to: Smart Transportation  
🚍 Created Transportation Component: ST Wiener Linien Ubahn  
Added ST Wiener Linien Ubahn to: Smart Transportation  
🌳 Created Environmental Component: ST Traffic Lights  
Added ST Traffic Lights to: Smart Transportation  
🏢 Created Building Component: ST Westbahnhof Control Room  
Added ST Westbahnhof Control Room to: Smart Transportation

Projects are set up successfully

### Setting up KPI Measurement Devices for Projects

Created Device CoContentMeasurementIndicator  
Linked Device CoContentMeasurementIndicator to GECO2Content  
Added Indicator to Green Energy  
Created Device LightMeasurementIndicator  
Linked Device LightMeasurementIndicator to GELux  
Added Indicator to Green Energy  
Created Device WienerLinienEnergyConsumedIndicator  
Linked Device WienerLinienEnergyConsumedIndicator to STenergyConsumedWienerLinien  
Added Indicator to Smart Transportation  
Created Device ControlRoomEnergyConsumedIndicator  
Linked Device ControlRoomEnergyConsumedIndicator to STenergyConsumedCR  
Added Indicator to Smart Transportation





KPI Measurement Devices are set up successfully

Setup Successful

### Step 01

Data Produced by gETurkenschanzpark: 2.71  
Data Produced by gEWienerLinienBusDepartment: 21  
Data Produced by gETUKarlsplatz: 11.03  
Data Produced by sTWienerLinien: 13  
Data Produced by sTWienerLinienStrassenbahn: 45.01  
Data Produced by sTWienerLinienUbahn: 98  
Data Produced by sTTrafficLights: 132  
Data Produced by sTWestbahnhofControlRoom: 397





### Step 02

Data Produced by gETurkenschanzpark: 9.23  
Data Produced by gEWienerLinienBusDepartment: 21  
Data Produced by gETUKarlsplatz: 11.93  
Aggregating data for Green Energy and Indicator CoContentMeasurementIndicator  
Newly Collected Values  
9.23, 2.71  
Aggregated Value for gETurkenschanzpark = 5.970000000000001 with AVG  
aggregation function  
---- Updating status ----  
Aggregated Value for 5.970000000000001  
Goal Reference Value for 5.0  
---- Setting status to WARN  ----  
 Adding Last Calculation Time: 2023-12-11T12:27:23.505+0100  
Aggregating data for Green Energy and Indicator LightMeasurementIndicator  
Newly Collected Values  
11.93, 11.03  
Aggregated Value for gETUKarlsplatz = 11.93 with MAX aggregation function  
---- Updating status ----  
Aggregated Value for 11.93  
Goal Reference Value for 11.0  
---- Setting status to WARN  ----  
 Adding Last Calculation Time: 2023-12-11T12:27:23.507+0100  
Data Produced by sTWienerLinien: 43  
Data Produced by sTWienerLinienStrassenbahn: 63.55  
Data Produced by sTWienerLinienUbahn: 184  
Data Produced by sTTrafficLights: 125  
Data Produced by sTWestBahnhofControlRoom: 180

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===== Step 03 =====

Data Produced by gETurkenschanzpark: 7.12  
Data Produced by gEWienerLinienBusDepartment: 32  
Data Produced by gETUKarlsplatz: 11.87  
Data Produced by sTWienerLinien: 27  
Data Produced by sTWienerLinienStrassenbahn: 52.74  
Data Produced by sTWienerLinienUbahn: 69  
Data Produced by sTTrafficLights: 25  
Data Produced by sTWestBahnhofControlRoom: 223

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===== Step 04 =====

Data Produced by gETurkenschanzpark: 2.45  
Data Produced by gEWienerLinienBusDepartment: 41  
Data Produced by gETUKarlsplatz: 11.60  
Aggregating data for Green Energy and Indicator CoContentMeasurementIndicator  
Newly Collected Values  
2.45, 7.12  
Aggregated Value for gETurkenschanzpark = 4.785 with AVG aggregation function  
---- Updating status ----  
Aggregated Value for 4.785  
Goal Reference Value for 5.0  
---- Setting status to GOOD  ----  
 Adding Last Calculation Time: 2023-12-11T12:27:23.509+0100  
Aggregating data for Green Energy and Indicator LightMeasurementIndicator  
Newly Collected Values  
11.60, 11.87  
Aggregated Value for gETUKarlsplatz = 11.87 with MAX aggregation function  
---- Updating status ----  
Aggregated Value for 11.87  
Goal Reference Value for 11.0  
---- Setting status to WARN  ----  
 Adding Last Calculation Time: 2023-12-11T12:27:23.510+0100  
Data Produced by sTWienerLinien: 39  
Data Produced by sTWienerLinienStrassenbahn: 57.69

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Data Produced by stWienerLinienUbahn: 62
Data Produced by stTrafficLights: 115
Data Produced by stWestBahnhofControlRoom: 245
Aggregating data for Smart Transportation and Indicator
WienerLinienEnergyConsumedIndicator
    Newly Collected Values
    39, 27, 43, 13
    Aggregated Value for stWienerLinien = 122.0 with SUM aggregation function
---- Updating status ----
    Aggregated Value for 122.0
    Goal Reference Value for 100.0
---- Setting status to WARN 🟡 ----
🕒 Adding Last Calculation Time: 2023-12-11T12:27:23.512+0100
Aggregating data for Smart Transportation and Indicator
ControlRoomEnergyConsumedIndicator
    Newly Collected Values
    245, 223, 180, 397
    Aggregated Value for stWestBahnhofControlRoom = 1045.0 with SUM aggregation
function
---- Updating status ----
    Aggregated Value for 1045.0
    Goal Reference Value for 800.0
---- Setting status to CRITICAL 🔴 ----
🕒 Adding Last Calculation Time: 2023-12-11T12:27:23.514+0100
```

#### ===== Step 05 =====

```
Data Produced by gETurkenschanzpark: 3.86
Data Produced by gEWienerLinienBusDepartment: 29
Data Produced by gETUKarlsplatz: 9.23
Data Produced by stWienerLinien: 22
Data Produced by stWienerLinienStrassenbahn: 60.85
Data Produced by stWienerLinienUbahn: 124
Data Produced by stTrafficLights: 50
Data Produced by stWestBahnhofControlRoom: 268
```

#### ===== Step 06 =====


```
Data Produced by gETurkenschanzpark: 7.27
Data Produced by gEWienerLinienBusDepartment: 23
Data Produced by gETUKarlsplatz: 11.92
Aggregating data for Green Energy and Indicator CoContentMeasurementIndicator
    Newly Collected Values
    7.27, 3.86
    Aggregated Value for gETurkenschanzpark = 5.5649999999999995 with AVG
aggregation function
---- Updating status ----
    Aggregated Value for 5.5649999999999995
    Goal Reference Value for 5.0
---- Setting status to WARN 🟡 ----
🕒 Adding Last Calculation Time: 2023-12-11T12:27:23.516+0100
Aggregating data for Green Energy and Indicator LightMeasurementIndicator
    Newly Collected Values
    11.92, 9.23
    Aggregated Value for gETUKarlsplatz = 11.92 with MAX aggregation function
---- Updating status ----
    Aggregated Value for 11.92
    Goal Reference Value for 11.0
---- Setting status to WARN 🟡 ----
🕒 Adding Last Calculation Time: 2023-12-11T12:27:23.516+0100
Data Produced by stWienerLinien: 41
Data Produced by stWienerLinienStrassenbahn: 46.16
Data Produced by stWienerLinienUbahn: 135
Data Produced by stTrafficLights: 98
```

Data Produced by stWestBahnhofControlRoom: 127


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===== Step 07 =====  
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Data Produced by gETurkenschanzpark: 8.05  
Data Produced by gEWienerLinienBusDepartment: 38  
Data Produced by gETUKarlsplatz: 8.31  
Data Produced by stWienerLinien: 40  
Data Produced by stWienerLinienStrassenbahn: 59.10  
Data Produced by stWienerLinienUbahn: 197  
Data Produced by stTrafficLights: 94  
Data Produced by stWestBahnhofControlRoom: 313

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===== Step 08 =====  
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Data Produced by gETurkenschanzpark: 2.25  
Data Produced by gEWienerLinienBusDepartment: 23  
Data Produced by gETUKarlsplatz: 11.75  
Aggregating data for Green Energy and Indicator CoContentMeasurementIndicator  
    Newly Collected Values  
        2.25, 8.05  
    Aggregated Value for gETurkenschanzpark = 5.15 with AVG aggregation function  
---- Updating status ----  
    Aggregated Value for 5.15  
    GoalReference Value for 5.0  
---- Setting status to GOOD  ----


 Adding Last Calculation Time: 2023-12-11T12:27:23.519+0100


Aggregating data for Green Energy and Indicator LightMeasurementIndicator  
    Newly Collected Values  
        11.75, 8.31  
    Aggregated Value for gETUKarlsplatz = 11.75 with MAX aggregation function  
---- Updating status ----  
    Aggregated Value for 11.75  
    Goal Reference Value for 11.0  
---- Setting status to WARN  ----

 Adding Last Calculation Time: 2023-12-11T12:27:23.519+0100

Data Produced by stWienerLinien: 25  
Data Produced by stWienerLinienStrassenbahn: 64.39  
Data Produced by stWienerLinienUbahn: 142  
Data Produced by stTrafficLights: 127  
Data Produced by stWestBahnhofControlRoom: 190

Aggregating data for Smart Transportation and Indicator  
WienerLinienEnergyConsumedIndicator  
    Newly Collected Values  
        25, 40, 41, 22  
    Aggregated Value for stWienerLinien = 128.0 with SUM aggregation function  
---- Updating status ----  
    Aggregated Value for 128.0  
    Goal Reference Value for 100.0  
---- Setting status to CRITICAL  ----

 Adding Last Calculation Time: 2023-12-11T12:27:23.520+0100

Aggregating data for Smart Transportation and Indicator  
ControlRoomEnergyConsumedIndicator  
    Newly Collected Values  
        190, 313, 127, 268  
    Aggregated Value for stWestBahnhofControlRoom = 898.0 with SUM aggregation  
function  
---- Updating status ----  
    Aggregated Value for 898.0  
    Goal Reference Value for 800.0  
---- Setting status to WARN  ----

 Adding Last Calculation Time: 2023-12-11T12:27:23.521+0100

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===== Step 09 =====  
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Data Produced by gETurkenschanzpark: 6.05  
Data Produced by gEWienerLinienBusDepartment: 46  
Data Produced by gETUKarlsplatz: 10.02  
Data Produced by stWienerLinien: 30  
Data Produced by stWienerLinienStrassenbahn: 64.05  
Data Produced by stWienerLinienUbahn: 166  
Data Produced by stTrafficLights: 57  
Data Produced by stWestBahnhofControlRoom: 209

=====  
===== Step 10 =====

Data Produced by gETurkenschanzpark: 3.30  
Data Produced by gEWienerLinienBusDepartment: 28  
Data Produced by gETUKarlsplatz: 10.25  
Aggregating data for Green Energy and Indicator CoContentMeasurementIndicator  
    Newly Collected Values  
    3.30, 6.05  
    Aggregated Value for gETurkenschanzpark = 4.675 with AVG aggregation function  
---- Updating status ----  
    Aggregated Value for 4.675  
    Goal Reference Value for 5.0  
---- Setting status to GOOD ● ----

⌚ Adding Last Calculation Time: 2023-12-11T12:27:23.522+0100

Aggregating data for Green Energy and Indicator LightMeasurementIndicator  
    Newly Collected Values  
    10.25, 10.02  
    Aggregated Value for gETUKarlsplatz = 10.25 with MAX aggregation function  
---- Updating status ----  
    Aggregated Value for 10.25  
    Goal Reference Value for 11.0  
---- Setting status to GOOD ● ----

⌚ Adding Last Calculation Time: 2023-12-11T12:27:23.523+0100

Data Produced by stWienerLinien: 35  
Data Produced by stWienerLinienStrassenbahn: 63.78  
Data Produced by stWienerLinienUbahn: 85  
Data Produced by stTrafficLights: 8  
Data Produced by stWestBahnhofControlRoom: 186

=====  
===== Step 11 =====

Data Produced by gETurkenschanzpark: 2.23  
Data Produced by gEWienerLinienBusDepartment: 42  
Data Produced by gETUKarlsplatz: 10.85  
Data Produced by stWienerLinien: 32  
Data Produced by stWienerLinienStrassenbahn: 45.22  
Data Produced by stWienerLinienUbahn: 121  
Currently, no new values present for component: stTrafficLights  
Data Produced by stWestBahnhofControlRoom: 152

=====  
===== Step 12 =====

Data Produced by gETurkenschanzpark: 6.61  
Data Produced by gEWienerLinienBusDepartment: 21  
Data Produced by gETUKarlsplatz: 7.54  
Aggregating data for Green Energy and Indicator CoContentMeasurementIndicator  
    Newly Collected Values  
    6.61, 2.23  
    Aggregated Value for gETurkenschanzpark = 4.42 with AVG aggregation function  
---- Updating status ----  
    Aggregated Value for 4.42  
    Goal Reference Value for 5.0  
---- Setting status to GOOD ● ----

⌚ Adding Last Calculation Time: 2023-12-11T12:27:23.525+0100

```
Aggregating data for Green Energy and Indicator LightMeasurementIndicator
  Newly Collected Values
    7.54, 10.85
  Aggregated Value for gETUKarlsplatz = 10.85 with MAX aggregation function
---- Updating status ----
  Aggregated Value for 10.85
  Goal Reference Value for 11.0
---- Setting status to GOOD ● ----
```

```
⌚ Adding Last Calculation Time: 2023-12-11T12:27:23.525+0100
```

```
Data Produced by sTWienerLinien: 28
Data Produced by sTWienerLinienStrassenbahn: 50.76
Data Produced by sTWienerLinienUbahn: 155
Currently, no new values present for component: sTTrafficLights
Data Produced by sTWestBahnhofControlRoom: 281
Aggregating data for Smart Transportation and Indicator
WienerLinienEnergyConsumedIndicator
```

```
  Newly Collected Values
    28, 32, 35, 30
  Aggregated Value for sTWienerLinien = 125.0 with SUM aggregation function
---- Updating status ----
  Aggregated Value for 125.0
  Goal Reference Value for 100.0
---- Setting status to WARN ● ----
```

```
⌚ Adding Last Calculation Time: 2023-12-11T12:27:23.526+0100
```

```
Aggregating data for Smart Transportation and Indicator
ControlRoomEnergyConsumedIndicator
  Newly Collected Values
    281, 152, 186, 209
  Aggregated Value for sTWestBahnhofControlRoom = 828.0 with SUM aggregation
function
```

```
---- Updating status ----
  Aggregated Value for 828.0
  Goal Reference Value for 800.0
---- Setting status to GOOD ● ----
```

```
⌚ Adding Last Calculation Time: 2023-12-11T12:27:23.527+0100
```

### ==== Step 13 =====

```
Data Produced by gETurkenschanzpark: 5.55
Data Produced by gEWienerLinienBusDepartment: 19
Data Produced by gETUKarlsplatz: 7.97
Data Produced by sTWienerLinien: 25
Data Produced by sTWienerLinienStrassenbahn: 51.53
Data Produced by sTWienerLinienUbahn: 146
Currently, no new values present for component: sTTrafficLights
Data Produced by sTWestBahnhofControlRoom: 399
```

### ==== Step 14 =====

```
Data Produced by gETurkenschanzpark: 4.49
Data Produced by gEWienerLinienBusDepartment: 35
Data Produced by gETUKarlsplatz: 9.01
Aggregating data for Green Energy and Indicator CoContentMeasurementIndicator
  Newly Collected Values
    4.49, 5.55
  Aggregated Value for gETurkenschanzpark = 5.02 with AVG aggregation function
---- Updating status ----
  Aggregated Value for 5.02
  Goal Reference Value for 5.0
---- Setting status to GOOD ● ----
```

```
⌚ Adding Last Calculation Time: 2023-12-11T12:27:23.528+0100
```

```
Aggregating data for Green Energy and Indicator LightMeasurementIndicator
  Newly Collected Values
    9.01, 7.97
```

```

    Aggregated Value for gETUKarlsplatz = 9.01 with MAX aggregation function
---- Updating status ----
    Aggregated Value for 9.01
    Goal Reference Value for 11.0
---- Setting status to GOOD ● ----
⌚ Adding Last Calculation Time: 2023-12-11T12:27:23.529+0100
Data Produced by sTWienerLinien: 23
Data Produced by sTWienerLinienStrassenbahn: 55.64
Data Produced by sTWienerLinienUbahn: 191
Currently, no new values present for component: sTTrafficLights
Data Produced by sTWestBahnhofControlRoom: 194
=====
===== Step 15 =====
Data Produced by gETurkenschanzpark: 3.86
Data Produced by gEWienerLinienBusDepartment: 53
Data Produced by gETUKarlsplatz: 12.90
Data Produced by sTWienerLinien: 42
Data Produced by sTWienerLinienStrassenbahn: 63.89
Data Produced by sTWienerLinienUbahn: 143
Currently, no new values present for component: sTTrafficLights
Data Produced by sTWestBahnhofControlRoom: 175
=====
===== Step 16 =====
Data Produced by gETurkenschanzpark: 7.41
Data Produced by gEWienerLinienBusDepartment: 58
Data Produced by gETUKarlsplatz: 11.96
Aggregating data for Green Energy and Indicator CoContentMeasurementIndicator
    Newly Collected Values
    7.41, 3.86
    Aggregated Value for gETurkenschanzpark = 5.635 with AVG aggregation function
---- Updating status ----
    Aggregated Value for 5.635
    Goal Reference Value for 5.0
---- Setting status to WARN ● ----
⌚ Adding Last Calculation Time: 2023-12-11T12:27:23.531+0100
Aggregating data for Green Energy and Indicator LightMeasurementIndicator
    Newly Collected Values
    11.96, 12.90
    Aggregated Value for gETUKarlsplatz = 12.9 with MAX aggregation function
---- Updating status ----
    Aggregated Value for 12.9
    Goal Reference Value for 11.0
---- Setting status to WARN ● ----
⌚ Adding Last Calculation Time: 2023-12-11T12:27:23.531+0100
Data Produced by sTWienerLinien: 35
Data Produced by sTWienerLinienStrassenbahn: 45.84
Data Produced by sTWienerLinienUbahn: 84
Currently, no new values present for component: sTTrafficLights
Data Produced by sTWestBahnhofControlRoom: 238
Aggregating data for Smart Transportation and Indicator
WienerLinienEnergyConsumedIndicator
    Newly Collected Values
    35, 42, 23, 25
    Aggregated Value for sTWienerLinien = 125.0 with SUM aggregation function
---- Updating status ----
    Aggregated Value for 125.0
    Goal Reference Value for 100.0
---- Setting status to WARN ● ----
⌚ Adding Last Calculation Time: 2023-12-11T12:27:23.532+0100
Aggregating data for Smart Transportation and Indicator
ControlRoomEnergyConsumedIndicator
    Newly Collected Values

```

```
238, 175, 194, 399
Aggregated Value for sTWestBahnhofControlRoom = 1006.0 with SUM aggregation
function
---- Updating status ----
Aggregated Value for 1006.0
Goal Reference Value for 800.0
---- Setting status to CRITICAL ● ----
🕒 Adding Last Calculation Time: 2023-12-11T12:27:23.533+0100
=====
===== Step 17 =====
Data Produced by gETurkenschanzpark: 2.86
Data Produced by gEWienerLinienBusDepartment: 27
Data Produced by gETUKarlsplatz: 10.37
Data Produced by sTWienerLinien: 16
Data Produced by sTWienerLinienStrassenbahn: 48.35
Data Produced by sTWienerLinienUbahn: 195
Currently, no new values present for component: sTTrafficLights
Data Produced by sTWestBahnhofControlRoom: 186
=====
===== Step 18 =====
Data Produced by gETurkenschanzpark: 8.25
Data Produced by gEWienerLinienBusDepartment: 29
Data Produced by gETUKarlsplatz: 10.89
Aggregating data for Green Energy and Indicator CoContentMeasurementIndicator
  Newly Collected Values
  8.25, 2.86
  Aggregated Value for gETurkenschanzpark = 5.555 with AVG aggregation function
---- Updating status ----
Aggregated Value for 5.555
Goal Reference Value for 5.0
---- Setting status to WARN ● ----
🕒 Adding Last Calculation Time: 2023-12-11T12:27:23.534+0100
Aggregating data for Green Energy and Indicator LightMeasurementIndicator
  Newly Collected Values
  10.89, 10.37
  Aggregated Value for gETUKarlsplatz = 10.89 with MAX aggregation function
---- Updating status ----
Aggregated Value for 10.89
Goal Reference Value for 11.0
---- Setting status to GOOD ● ----
🕒 Adding Last Calculation Time: 2023-12-11T12:27:23.535+0100
Data Produced by sTWienerLinien: 32
Data Produced by sTWienerLinienStrassenbahn: 56.73
Data Produced by sTWienerLinienUbahn: 148
Currently, no new values present for component: sTTrafficLights
Data Produced by sTWestBahnhofControlRoom: 201
=====
===== Step 19 =====
Data Produced by gETurkenschanzpark: 6.64
Data Produced by gEWienerLinienBusDepartment: 34
Data Produced by gETUKarlsplatz: 12.00
Data Produced by sTWienerLinien: 42
Data Produced by sTWienerLinienStrassenbahn: 55.91
Data Produced by sTWienerLinienUbahn: 108
Currently, no new values present for component: sTTrafficLights
Data Produced by sTWestBahnhofControlRoom: 377
=====
===== Step 20 =====
Data Produced by gETurkenschanzpark: 4.41
Data Produced by gEWienerLinienBusDepartment: 29
```



```
Data Produced by gETUKarlsplatz: 8.50
Aggregating data for Green Energy and Indicator CoContentMeasurementIndicator
  Newly Collected Values
    4.41, 6.64
  Aggregated Value for gETurkenschanzpark = 5.525 with AVG aggregation function
---- Updating status ----
  Aggregated Value for 5.525
  Goal Reference Value for 5.0
---- Setting status to WARN ● ----
⌚ Adding Last Calculation Time: 2023-12-11T12:27:23.537+0100
Aggregating data for Green Energy and Indicator LightMeasurementIndicator
  Newly Collected Values
    8.50, 12.00
  Aggregated Value for gETUKarlsplatz = 12.0 with MAX aggregation function
---- Updating status ----
  Aggregated Value for 12.0
  Goal Reference Value for 11.0
---- Setting status to WARN ● ----
⌚ Adding Last Calculation Time: 2023-12-11T12:27:23.537+0100
Data Produced by stWienerLinien: 26
Data Produced by stWienerLinienStrassenbahn: 50.59
Data Produced by stWienerLinienUbahn: 74
Currently, no new values present for component: stTrafficLights
Data Produced by stWestBahnhofControlRoom: 152
Aggregating data for Smart Transportation and Indicator
WienerLinienEnergyConsumedIndicator
  Newly Collected Values
    26, 42, 32, 16
  Aggregated Value for stWienerLinien = 116.0 with SUM aggregation function
---- Updating status ----
  Aggregated Value for 116.0
  Goal Reference Value for 100.0
---- Setting status to WARN ● ----
⌚ Adding Last Calculation Time: 2023-12-11T12:27:23.538+0100
Aggregating data for Smart Transportation and Indicator
ControlRoomEnergyConsumedIndicator
  Newly Collected Values
    152, 377, 201, 186
  Aggregated Value for stWestBahnhofControlRoom = 916.0 with SUM aggregation
function
---- Updating status ----
  Aggregated Value for 916.0
  Goal Reference Value for 800.0
---- Setting status to WARN ● ----
⌚ Adding Last Calculation Time: 2023-12-11T12:27:23.539+0100
=====
```